FAA William J. Hughes Technical Center

Weather And Radar Processor (WARP)

PURPOSE: The Weather and Radar Processor (WARP) system is an en route weather system that provides Mosaiced Next Generation Weather Radar (NEXRAD) information to air traffic controllers via the Display System Replacement (DSR) and provides meteorological products to the Center Weather Service Unit (CWSU) meteorologists and Traffic Management Specialists (TMU).



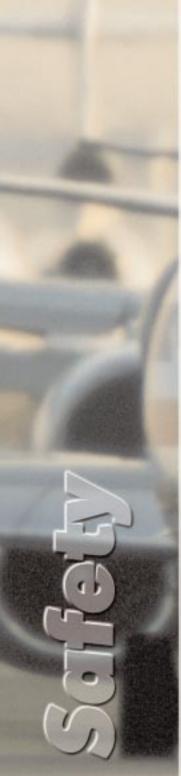
BACKGROUND

The WARP system is to be deployed in 21 Air Route Traffic Control Centers (ARTCCs) and is being developed in a staged approach. The first stage, stage 0, is a replacement for the Meteorologist Weather Processor (MWP) and was commissioned in October 1997. Stages 1 and 2 will contain all of the Stage 0 requirements as well as the requirements for interface with other National Airspace System (NAS) subsystems and the DSR. Stage 3 includes Preplanned Product Improvements (P3I), which will allow further weather product capabilities for air traffic control (ATC) specialists, meteorologists, and pilots.

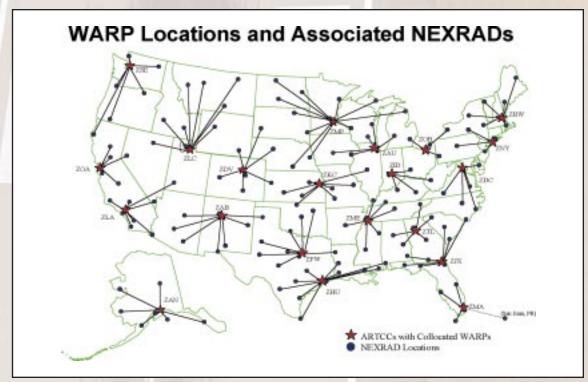


ACCOMPLISHMENTS

- Advisory member to the Cost Plus Award Fee (CPAF) Plan Performance Evaluation Board.
- Participated in monthly WARP Program Status Meetings (PSM) to evaluate the progress of the WARP project development by the prime contractor, the Harris Corp.
- Presented briefings to the Northwest Mountain Region and the Seattle ARTCC on the WARP first site testing activities. Resolved several site test issues (March and July 1998).
- Witnessed the WARP Interface Certification testing for NEXRAD Builds
 9 and 10 where WARP was granted unconditional certification (April and June 1998).
- Conducted WARP interface testing with several NAS subsystems at the William J. Hughes Technical Center. The subsystems include the National Airspace Data Interchange Network (NADIN), AWOS Data Acquisition System (ADAS), Weather Message Switching Center Replacement (WMSCR), and the DSR (April and June 1998).







 Updated the WARP Test and Evaluation Master Plan (TEMP) to reflect changes to the WARP acquisition program staged approach (October 1998).

FUTURE WORK

• Witness WARP Factory Acceptance Test (FAT) and Site Acceptance Test (SAT) (December 1998-March 1999).

 Conduct Year 2000 (Y2K) Compliance Certification on the WARP system (March 1999).

 Conduct WARP Operational Test and Evaluation (OT&E) at the FAA William J. Hughes Technical Center and at the Seattle, WA, ARTCC (April-July 1999).

• Conduct Production Site Testing (PST) (January-June 2000).

For additional information regarding the Weather and Radar Processor program, contact:

Communication/Navigation/Surveillance Engineering and Test Division, Weather Branch

Federal Aviation Administration William J. Hughes Technical Center Atlantic City International Airport, NJ 08405 Phone: (609) 485-5308

Fax: (609) 485-4035 http://wx.aw.tc.faa.gov